

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A messaging system, comprising:
 - a client device ~~having stored therein~~ to store a client application[[,]]
~~which is adapted to be executed by said client device;~~
 - a server ~~having stored therein~~ to store a server application[[,]]
~~which is adapted to be executed by said server;~~
 - a plurality of wireless networks[[,]] ~~each of which is adapted to~~[[:]]
communicate messages between said client device and said server; and to
support one or more wireless network protocols;
 - a protocol gateway ~~encapsulating a~~ to encapsulate a fundamental
network protocol, ~~which underlies~~ said fundamental network protocol to underline
each of said one or more wireless network protocols and ~~includes~~ to include a
protocol stack that corresponds substantially to an Open System Interconnection
(OSI) model and incorporates a simple network transport layer (SNTL); and
 - a communicator means for communicating to communicate a
message between said client application and said server application[[,]] over a
selected wireless network protocol through said protocol gateway[[,]]
independent of said selected wireless network protocol.
2. (currently amended) The messaging system according to claim
1, wherein:
 - said SNTL maps to layer 4 of said OSI model.

3. (original) The messaging system according to claim 1, wherein said protocol stack further comprises:

an application layer mapped to layer 7 of said OSI model;
a network layer mapped to layer 3 of said OSI model;
a data link layer mapped to layer 2 of said OSI model; and
a physical layer mapped to layer 1 of said OSI model.

4. (currently amended) The messaging system according to claim 3, wherein:

said application layer comprises ~~means for providing~~ an interface between a client application and said SNTL; and

~~such that~~ said client application is adapted to send and receive messages across said plurality of wireless networks without having any knowledge information of a communication implementation.

5. (currently amended) The messaging system according to claim 4, wherein:

said client application is selected from the a group consisting of one or more e-mail applications, one or more file transfer applications, and a plurality of end user applications.

6. (currently amended) The messaging system according to claim 3, wherein:

said network layer comprises means for providing network protocol layer functionality and hiding the details of said functionality from said SNTL.

7. (currently amended) The messaging system according to claim 6, wherein:

said network layer comprises an Internet Protocol (IP).

8. (currently amended) The messaging system according to claim 3, wherein:

said data link layer and said physical layer are together adapted to comply with a public switch telephone network protocol.

9. (currently amended) The messaging system according to claim 3, wherein:

said data link layer and said physical layer are together adapted to comply with a cellular digital packet data protocol.

10. (currently amended) The messaging system according to claim 3, wherein:

said data link layer and said physical layer are together adapted to comply with a Mobitex protocol.

11. (currently amended) The messaging system according to claim 3, wherein:

said data link layer and said physical layer are together adapted to comply with a RIM protocol.

12. (currently amended) The messaging system according to claim 3, wherein:

said data link layer and said physical layer are together adapted to comply with an ARDIS protocol.

13. (currently amended) The messaging system according to claim 3, wherein:

said data link layer and said physical layer are adapted to comply with a GPRS protocol.

14. (currently amended) The messaging system according to claim 3, wherein:

said data link layer and said physical layer are adapted to comply with a GSM protocol.

15. (currently amended) The messaging system according to claim 3, wherein:

said data link layer and said physical layer are adapted to comply with said selected wireless network protocol.

16. (currently amended) The messaging system according to claim 3, wherein:

said data link layer and said physical layer are adapted to comply with a wireless network protocol selected from the a group consisting of comprising a public switch telephone network protocol, a cellular digital packet data protocol, a Mobitex protocol, an ARDIS protocol, a RIM protocol, a GPRS protocol, and a GSM protocol.

17. (currently amended) The messaging system according to claim 1, wherein:

said SNTL includes a connectionless UDP-like transport protocol having substantially all ~~of the~~ features and advantages of TCP.

18. (currently amended) The messaging system according to claim 17, wherein:

said features are selected from the a group consisting of comprising message segmentation, message segment reassembly, message retries, and message duplication.

19. (currently amended) The messaging system according to claim 17, wherein:

said SNTL includes a transport header having a preselected width.

20. (currently amended) The messaging system according to claim 19, wherein:

said preselected width comprises ~~about~~ between four to six bytes.

21. (currently amended) The messaging system according to claim 19, further comprising:

~~comprises~~ a single segment message header.

22. (currently amended) The messaging system according to claim 19, further comprising:

~~comprises~~ a multiple segment message header.

23. (currently amended) The messaging system according to claim 19, wherein said transport header further comprises:

a first field adapted to indicate a version number of a segment header;

a second field adapted to indicate a message identification value, ~~which is~~ adapted to discard segment/message duplications and to match acknowledgments with messages;

a third field adapted to indicate protocol information;

a fourth field adapted to indicate a total number of bytes contained in a message segment to be sent including said segment header; and

a fifth field adapted to indicate a number of each said message segment.

24. (currently amended) The messaging system according to claim 23, wherein:

said first field comprises two bits.

25. (currently amended) The messaging system according to claim 23, wherein:

said first field comprises bit 0 and bit 1 of a first word in said segment header.

26. (currently amended) The messaging system according to claim 23, wherein:

said first field comprises a value of from 0 to 3.

27. (currently amended) The messaging system according to claim 23, wherein:

said second field comprises thirteen bits.

28. (currently amended) The messaging system according to claim 23, wherein:

said second field comprises bits 2 through 14 of a first word in said segment header.

29. (currently amended) The messaging system according to claim 23, wherein:

said second field comprises a value of from 0 to 8,192.

30. (currently amended) The messaging system according to claim 23, wherein:

said third field comprises five bits.

31. (currently amended) The messaging system according to claim 23, wherein:

said third field comprises bits 15 through 19 of a first word in said segment header.

32. (currently amended) The messaging system according to claim 23, wherein:

bit 19 of said third field comprises a value indicative of message segmentation.

33. (currently amended) The messaging system according to claim 32, wherein:

bit 19 comprises a value of 0 ~~where the~~ when said message is not segmented.

34. (currently amended) The messaging system according to claim 32, wherein:

bit 19 comprises a value of 1 ~~where the~~ when said message is segmented.

35. (currently amended) The messaging system according to claim 23, wherein:

bit 16 of said third field comprises a value indicative of a message type.

36. (currently amended) The messaging system according to claim 35, wherein:

bit 16 comprises a value of 0 ~~where the~~ when said message includes a positive acknowledgment.

37. (currently amended) The messaging system according to claim 35, wherein:

bit 16 comprises a value of 1 ~~where the~~ when said message includes a negative acknowledgment.

38. (currently amended) The messaging system according to claim 23, wherein:

bit 15 of said third field comprises a message indicator.

39. (currently amended) The messaging system according to claim 38, wherein:

bit 15 comprises a value of 0 ~~where the~~ when said message is an application message.

40. (currently amended) The messaging system according to claim 38, wherein:

bit 15 comprises a value of 1 ~~where the~~ when said message is a system message.

41. (currently amended) The messaging system according to claim 23, wherein:

said fourth field comprises twelve bits.

42. (currently amended) The messaging system according to claim 41, wherein:

said fourth field comprises bits 20 through 31 of a second word in said segment header.

43. (currently amended) The messaging system according to claim 42, wherein:

said fourth field comprises a value of from 4 to 4,096.

44. (currently amended) The messaging system according to claim 23, wherein:

said fifth field comprises eight bits.

45. (currently amended) The messaging system according to claim 44, wherein:

said fifth field comprises bits 0 through 7 of a third word in said segment header.

46. (currently amended) The messaging system according to claim 44, wherein:

said fifth field comprises a value of from 2 to 255.

47. (currently amended) The messaging system according to claim 23, wherein:

said fifth field is adapted to re-order a plurality of message segments into a single complete message.